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Northeast-Midwest Report

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The Northeast-Midwest Institute was formed in 1977 at the request of representatives and senators who wanted to ensure the future economic vitality of those states that historically have formed the nation's industrial heartland. The Institute works closely with the Northeast-Midwest Congressional Coalition, a bipartisan group of nearly 200 representatives, and with the 36 senators who comprise the Northeast-Midwest Senate Coalition. In addition to elected officials, the Institute provides information and analysis to corporate, academic, and labor leaders who recognize the common problems facing their states and the fact that federal policies often create obstacles to regional economic growth. Institute staff work in five major issue areas: economic development, human resources, energy, natural resources, and trade.

Achieving Clean Water with State Revolving Loan Funds:

A Progress Report

Elizabeth C. Conklin

Northeast-Midwest Institute
The Center for Regional Policy
218 D. Street, S.E.
Washington, D.C. 20003

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Executive Summary

When amending the Clean Water Act in 1987, Congress discontinued its 30-year-old program of grants to public entities for the construction of wastewater-treatment facilities in favor of state-run revolving loan programs, popularly known as SRFs. Loans through the program are available in perpetuity for wastewater treatment and general water-quality improvement projects. To capitalize the program, Congress pledged to provide $8.4 billion; each state must match 20 percent of the federal funds it receives.

The basic concept of the revolving loan program is workable and sound, but specific features are proving troublesome. To date federal appropriations to capitalize the program are 17 percent below authorized levels. States are limited in their opportunities to increase the fund size or issue certain loans because the funds are released by the federal government through letters of credit which are drawn against when the funds must be paid out on projects. Moreover, regulations carried over from the Construction Grants Program seriously limit state flexibility in funding eligible projects, declare certain categories of needs ineligible, require cumbersome administrative procedures, and diminish local community enthusiasm for the loans.

Six states in the Northeast-Midwest region face the additional problem of a federal allocation formula biased to underfund their needs. Data gathered by the Environmental Protection Agency show that although 57 percent of need for wastewater treatment exists in the region, northeastern and midwestern states receive only 53 percent of the available funds. The formula, which expires in 1990, should be revised to deal with state needs and the inequities that permit Massachusetts to receive only 42 percent of the funds for which it is eligible while Wyoming receives 1978.6 percent of its need.

If states are to assume the full program burden necessary to meet federally mandated water-quality standards, they must have adequate tools-- money, the freedom to identify and address the pollution sources within their borders, and a program that is attractive to their communities. Therefore, Congress should:

- increase the authorization levels or extend the period for the remaining capitalization grants so that, at the minimum, the full amount of money authorized under the 1987 Amendments to the Clean Water Act can be appropriated;
- remove the restrictions on project funding so that states can support those cost-effective projects that promise the greatest water-quality improvement;
- reduce federal oversight to an essential and meaningful minimum;
- allow reasonable administrative costs to be paid out of the fund for its duration; and
- revise the allocation formula to modify the 1/2 of 1 percent provision that benefits small states and reflect more accurately the equitable funding intended by the Clean Water Act.

1. Evolution of a Program

Congress enacted major changes to the federal wastewater-treatment facilities construction program in the 1987 Amendments to the Clean Water Act (CWA). Essentially Congress phased out the grants program and put a revolving loan fund in its place. With the new program now implemented across the nation, it is time for a preliminary appraisal of its operation.

The Environmental Protection Agency's (EPA) grant program for wastewater-treatment plant construction has been the centerpiece of state efforts to restore and maintain clean water. The stringent treatment standards mandated by the Clean Water Act have been expensive to implement. Since 1972, Congress has appropriated $50 billion for this program, one of the nation's largest infrastructure development efforts. Using these funds, communities have addressed many wastewater-treatment needs, thereby moving toward achievement of the CWA goal of fishable, swimmable waters throughout the nation.

The responsibility for dealing with wastewater traditionally has fallen to the community whenever population density becomes too great to allow septic systems or open sewers. Early community systems poured the gathered wastes into nearby bodies of water in the belief that water had purifying properties. Federal assistance for the construction of wastewater-treatment facilities began in the late 1940s with the realization that open waterways were not limitless natural systems capable of treating and eliminating the wastes poured into them. Deleterious effects of such dumping included declining or diseased fish populations, illnesses spread within the community, and waterways foul to sight and smell. The burgeoning population and increasingly complex industrial processes of the next decades only exacerbated the problem. After several variations the program acquired its present scope and form in the Clean Water Act of the early 1970s. The legislative evolution of the construction grants program is presented in Appendix II.

2. State Water-Pollution Control Revolving Loan Funds

In 1987 Congress amended the Clean Water Act to discontinue its program of grants to public entities for the construction of wastewater-treatment facilities. During the six-year period 1988 to 1994, EPA will phase out construction grants and establish state revolving loan funds to carry on where the federal grant program left off. In the amendments, Congress authorized $18 billion for water-pollution control--$9.6 billion for the existing construction grants program through fiscal 1990 and $8.4 billion in one-time grants through fiscal 1994 to capitalize the SRF programs. SRF monies will be allocated to the states according to the same formula used for construction grants. Each state will provide a 20 percent match toward the capitalization of the fund.

According to a recent report by the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA), "Since enactment of the 1987 amendments, states have worked diligently to establish State Revolving Loan Funds and are well under way."[1] As of late fall 1989, 15 of the 18 northeastern and midwestern states had fully set up SRF programs; the three remaining states have passed enabling legislation and programs will soon be operational.

Under present law, SRF loans are available to municipalities, intermunicipal, interstate, or state agencies for:

- construction of publicly owned wastewater-treatment facilities;
- conservation and management programs for protection of estuaries and reduction of nonpoint source runoff;
- purchase or refinancing of debt obligations of municipal, intermunicipal, and interstate agencies at below-market rates if the debt was incurred after March 7, 1985;
- guarantee or purchase of insurance when desirable;
- provision of loan guarantees for municipal or intermunicipal revolving loan funds;
- earning interest; or
- paying administrative costs.

The criteria for eligible project costs were carried over from Section 212 of the construction grants program. Loans are available for the erection, building, acquisition, alteration, remodeling, improvement, or extension of treatment works (see expanded text in Appendix II, Legislative History). Over the years this broad definition was narrowed to address only projects documented in the state's "intended use plan" submitted annually to EPA. Fundable projects are limited to secondary treatment (category I), more stringent treatment (category II), or cost-effective alternatives;

[1]Association of State and Interstate Water Pollution Control Administrators, *Clean Water Act State Municipal Wastewater Treatment Funding Needs and Impacts of the Administration's Fiscal Year 1990 Budget* (Washington, D.C., Spring 1989), Attachment C, p. 1.

tives; new interceptor sewers (category IVB); and infiltration and inflow correction (category IIIA). Eligible land costs are limited to those necessary for the treatment facility itself. Public wastewater-treatment projects previously eligible for funding--primary-treatment facilities, replacement and rehabilitation of sewers (category IIIB), new collector sewers (category IVA), and correction of combined sewer overflows (category V)--may be funded using not more than 20 percent of the allotment. (For fiscal 1990 Congress lifted this restriction and allowed full consideration for funding.) Projects dealing with pollution from separate stormwater sewers will be eligible for funding in fiscal 1991. Definitions of the seven categories are included in Appendix II.

First use of the funds must be for projects to bring communities into compliance with enforceable standards, such as secondary treatment or advanced treatment to achieve 85 percent removal of conventional wastes, new interceptor sewers and infiltration/inflow correction. Until all projects in these categories are completed, 80 percent of the available funds must be applied to them. The remaining 20 percent may be designated by the governor for other wastewater-treatment needs including projects eligible for funding prior to the 1984 CWA amendments. They include nonpoint source and groundwater-protection projects, replacement and rehabilitation of sewers, new collector sewers, and correction of combined sewer overflows.

SRF loans must be available for 20-year periods at or below-market interest rates or interest-free. Recipients must have dedicated revenues to cover the loan repayment, which begins one year after completion of construction. The state fund receives all repaid monies--principal and interest.

CWA specifies that federal grants to capitalize the revolving loan programs are allocated according to the ratio of the estimated cost of constructing all needed publicly owned treatment works in that state to the estimated cost of constructing all needed publicly owned treatment works in all the states, as documented in the state's intended use plan, but no state receives less than 1/2 of 1 percent of the funds. The formula used, however, is not as simple and includes some weighting by type of needed construction and population. Of the nine states that fall into the "1/2 of 1 percent" category and thus enjoy a higher per-capita level of federal funding than others, Delaware and Vermont are in the Northeast-Midwest region. All allocated monies must be obligated to projects in the states within two years or returned to EPA for reallocation.

States were allowed to increase the funds in their SRFs by diverting money from their construction grant allotment. Upon request of the governor, EPA could release 50 percent of the 1987 allocation and 75 percent of the 1988 allocation for SRF use. In the Northeast-Midwest region, Connecticut, Illinois, Maine, and New Jersey used this option.

The Clean Water Act authorized $8.4 billion in "seed" money to capitalize the SRF program through fiscal 1994. However, congressional appropriations to date are 17 percent below the authorization level, as shown in the accompanying table.

The states have committed themselves to the inevitable conversion from federal grants to state loan programs. By March 1989 states had issued $442 million in project loans; by September 1989 the total was $1.6 billion. Advance commitments of the 20 percent state match totaled $836 million nationally, $335.7 million in the Northeast-Midwest region. For comparison purposes the full federal share to match that level of state funding would be $4.15 billion.[2]

Clean Water Act Funding: Fiscal 1989-Fiscal 1994

Year	Authorized (in millions of dollars)	Appropriated	Percent of Authorization
1989	1,200	975	81
1990	1,200	1,025	85
1991	2,400	--	--
1992	1,800	--	--
1993	1,200	--	--
1994	600	--	--
Total	8,400	2,000	--

SOURCE: Northeast-Midwest Institute staff calculations from P.L. 100-4, 1987 Amendments to the Federal Water Pollution Control Act; P.L. 100-404 and P.L. 101-239, Appropriations Laws, before sequestration.

[2]Roberta Savage, Executive Director, ASIWPCA, Testimony before the Senate Subcommittee on Environment on Implementation of the 1987 Water Quality Act (Washington, D.C., June 1989), p. 5.

3. State Wastewater Treatment Needs and Fiscal Realities

Although achievement of the goal of fishable, swimmable waters is measurably and perceptibly closer than it was in the early 1980s, it is not fully realized in most of the nation's lakes, rivers, and seacoasts. Federal programs to control industrial waste discharges and provide grants for wastewater-treatment facilities have made enormous progress against the largest and most direct sources of pollution to these waterways. Control of the more diffuse sources of contamination and construction of essential pollution-control infrastructure will require billions more dollars.

After 30 years and more than $50 billion of federal assistance to communities, all but 2 percent of the major publicly owned treatment works and 4.3 percent of minor treatment works are in compliance with clean water standards. Originally required by 1977 and subsequently extended to July 1, 1988, the standards mandate capability to remove 85 percent of conventional wastes, which usually requires secondary treatment. In some instances even more stringent treatment was required to meet state water-quality standards.

The capital costs of constructing the needed treatment plants and sewers in each state are documented in biennial reports to Congress by EPA. These reports contain the most comprehensive analysis of wastewater-treatment facility needs for which a water quality or health problem can be documented. States are required to report their eligible construction needs in two categories: "current year" projects to serve the present population and "design year" projects to meet the demand anticipated in 20 years. The reports have important implications for the amount of funds authorized by Congress under the Clean Water Act and the actual distribution of those funds.

Table 1 in Appendix I provides a state-by-state breakdown of wastewater-treatment needs and the allocation of federal funds under the 1987 amendments to CWA as documented by the *1988 Needs Survey Report to Congress*. It shows the percentage of grant funds that a state receives under the existing funding formula, the current year needs in dollars, the current year needs as a percentage of the national needs, and the needs in dollars and as a percentage for design year 2008 population.

According to the *Needs Survey* data, 57 percent of the current year funding need nationwide exists in the 18 northeastern and midwestern states. These states documented $38,925 million of current year projects in the seven categories eligible for federal funding (see Table 1, column 2) and anticipate $42,935 million to meet design year demand (see Table 1, Column 1).[3]

Six of the nine states with 50 percent or more of their identified current year need in seven eligible categories are in the Northeast-Midwest region. These needs--replacement and rehabilitation of sewers (IVB), new collector sewers (IVA), and combined sewer overflows (V)--may be funded at the discretion of the governor using no more than 20 percent of the federal funds allocated to that state. Rhode Island tops the list with 77 percent of its $364 million need in these categories, followed by New York with 73 percent, Indiana 72 percent, New Hampshire 63 percent,

[3]EPA, Office of Municipal Pollution Control, *1988 Needs Survey Report to Congress: Assessment of Needed Publicly Owned Wastewater Treatment Facilities in the United States* (Washington, D.C., 1989) pp. A2-A5.

North Carolina 56 percent, Florida and Oregon 55 percent, Connecticut 54 percent, and Illinois 53 percent.[4]

Although all phases of treatment are considered when calculating needs (including conveyance, storage, treatment, recycling, and reclamation of municipal wastewater) total needs in a state may be significantly higher than those reported to EPA. The EPA report does not include costs for operation and maintenance or costs that were ineligible under the construction grants program, including primary treatment facilities. It also excludes needs that are newly eligible, such as stormwater treatment, nonpoint source control, or estuary-protection activities. States were invited but not required to document these ineligible needs, a time-consuming task of dubious value in the opinion of overburdened state agencies.

[4]*Ibid.*, p. A3.

4. Fitting Loans and Needs Together

Congress did not revise the federal role in wastewater-treatment facility construction because the task had been completed. EPA's tightly defined survey demonstrates that much still remains to be done, even as facilities built in the early years of the program are reaching the end of their design life. The need to construct and repair treatment facilities will be a continuous one.

Although consensus among northeastern and midwestern states and several professional organizations supports the concept of revolving loan funds for wastewater-treatment projects, consensus also supports the need to fine-tune the program to meet construction needs adequately *in perpetuity*. In testimony before the Senate Subcommittee on Environmental Protection in June 1989 the director of ASIWPCA stated:

> State and local governments reached a covenant with Congress and the Administration in the 1987 Water Quality Act. Over $83 billion in wastewater construction needs were transferred to State and Local governments in exchange for $18 billion in seed funding. All parties agreed to build a workable program, wholly State managed, with minimal Federal requirements. Unfortunately, the program has fallen far short of achieving those goals.[5]

While the final remark may overstate the opinions of some, few disagree on the specific aspects of the SRFs that need action: funding levels and availability, restrictions carried over from the construction grants program, and certain aspects of EPA oversight.

Federal Funding Level and Availability of Funds

Both appropriations levels and letters of credit threaten the economic foundation of the SRFs. Furthermore, a side effect of the changeover from grants to loans (described below) is likely to slow progress in many states for several years. The diminished level of congressional appropriations, however, constitutes the greatest danger.

The 1987 agreement between Congress and the states that resulted in the revolving loan fund program was based on the belief that the federal capitalization dollars would be appropriated and the hope that the total would be adequate for the task. In many states federal funds are essential to fulfilling wastewater-treatment requirements effectively; in all states they are essential to fulfilling the needs more expeditiously.

Two years of federal appropriations for the SRFs have provided only 83 percent of the authorized capitalization funds. For fiscal 1991, the peak dollar year for capitalizing this program, the administration requested $1.6 billion, or 66 percent of the authorized $2.4 billion. If Congress appropriates only $1.6 billion, this program will have lost 25 percent of the funding authorized for the entire capitalization period. The $1.2 billion loss would be twice as large as the entire

[5]Roberta Savage, Testimony on Implementation of the 1987 Water Quality Act, p. 2.

authorization for fiscal 1994. Future authorizations must be increased or extended to restore these unappropriated funds to the program.

The letters of credit (LOC) method for distributing SRF funds to each state is a departure from the direct distribution of the construction grants monies. Each state's allocation is an amount of credit available in installments; lump-sum distribution is discouraged to all but a few aggressive states. Under the LOC system the funds are not released until they must be paid out to the loan recipients according to a schedule of binding commitments. EPA regulations specify that

> with its first application for a capitalization grant, a State must submit a schedule of estimated quarterly disbursements from the grant for the year following the grant award date. At the end of the third quarter of each Federal fiscal year thereafter, the State must submit a schedule of estimated quarterly disbursements for the following Federal fiscal year. If the State anticipates that actual quarterly disbursements may deviate significantly (by more than 10 percent) from the estimated amounts, it must notify the Agency.[6]

In this way most states are denied the opportunity to earn short-term interest on the funds and are limited in their options for leveraging additional funds. Failure to anticipate accurately when monies will be needed can impede the progress of construction. Furthermore, under this distribution method the option to provide refinancing is very difficult to implement.

The states also face a potential "slowdown" period after all capitalization funds have been committed to projects and before repayments begin. As these loans "revolve" the dollars available for projects will increase slowly and be available for new projects on a frequent and predictable basis. However, because repayment does not begin until the project is completed, states that must finance expensive and complex projects immediately will have money for very few projects and years to wait until repayment monies are available for other projects. Under most direct loans and certain leveraged programs, SRF interest as well as principal will return to the fund. In other leveraged programs and cases of no-interest loans to very small or poor communities, only the principal will return to the fund.

Carryover Provisions from the Construction Grants Program

While the states assume responsibility for financial and project management of the SRFs, program oversight remains with EPA just as it was for the construction grants program. Under EPA guidance for SRFs, the criteria and provisions cited below remain in effect for the duration of the program, forever.

Community options for improving water quality are reduced by the restrictions on project funding. In recent testimony to Congress, officials of the Water Pollution Control Federation stated that

> lack of flexibility limits the options available for meeting the law, even when these options could make a substantially greater contribution to water quality. For

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[6]EPA State Revolving Fund Program Implementation Regulations, *Federal Register* vol. 55, no. 53, March 19, 1990, p. 10177.

example, the CWA requires secondary treatment at all publicly-owned treatment works. However, implementing secondary treatment. . .may not improve receiving water quality to the extent that controlling combined sewer overflows could.[7]

Current restrictions on the use of funds for replacement and rehabilitation of sewers, new collector sewers, and correction of combined sewer overflows have serious implications for the Northeast-Midwest region. In one third of these states, the majority of their wastewater-treatment construction needs must fight for 20 percent of the federal funding to that state. As mentioned Rhode Island, New York, Indiana, New Hampshire, Connecticut, and Illinois have 53 to 77 percent of their needs in categories not fully eligible for funding. Other restrictions preclude communities from using the SRF for "one-stop shopping" even for eligible projects. For example, certain land costs--for disposal of the sludge generated by the treatment process or for buffer zones between a treatment facility and adjacent neighbors--are ineligible.

The first and most direct way for states to meet CWA goals was to control industrial dumping and require more comprehensive treatment of wastewater. This congressionally mandated focus successfully reduced point sources of contamination and, consequently, highlighted the effects of nonpoint (more varied) pollutant sources. To achieve maximum water-quality improvement, program emphasis for perpetuity must be cost-effective and flexible, acknowledging the diversity of problems and potential solutions states will address. The program must allow full eligibility for replacement and rehabilitation of sewers, new collector sewers, and correction of combined sewer overflows, as well as nonpoint source control, groundwater protection projects and previously ineligible needs.

Administration of projects under the SRF program will continue to require the multiple bookkeeping of the old grants program. According to EPA's *Initial Guidance for State Revolving Funds*, the restrictions on project funding apply only to an amount equivalent to the capitalization grant monies received by the state.

> When a capitalization grant is used directly to fund an SRF reserve account to secure a State bond issue (leveraging), these requirements attach to section 212 [wastewater treatment] projects funded up to an amount equivalent to the capitalization grant only. . ., and not to other types of projects for which the Act authorized funding, nor to section 212 projects funded with other monies in the fund in excess of the grant amount.[8]

Financial review of the SRFs is accomplished through an audit carried out at least once a year by EPA'S Office of the Inspector General or independently conducted for the state. That office has stated that federal money given to the states continues to be federal money in perpetuity; therefore the inspector general has jurisdiction over those dollars whenever they are used. The state must forever keep separate the equivalent of the capitalization money received from the

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[7]Ira L. Whitman, on behalf of the Water Pollution Control Federation, Testimony before the House Public Works and Transportation Committee on the 1987 Water Quality Act (Washington, D.C., March 22, 1990), p. 7.

[8]EPA, Office of Municipal Pollution Control, *Initial Guidance for State Revolving Funds* (Washington, D.C., January 1988), p. 12.

federal government and forever loan it out under the conditions carried over from the construction grants program.[9]

SRFs are subject to National Environmental Policy Act (NEPA) review for *all* projects that use funds directly from the federal capitalization grants. Projects receiving loans must adhere to the prevailing wage provisions of the Davis Bacon Act and the provisions of 23 other federal laws. These so-called cross-cutters include 13 environmental laws--cultural, historical, and natural environments, certain economic measures, anti-discrimination measures, and tax laws (see Appendix II).

Two program need reports are required annually from each state. The annual report is occasion for EPA scrutiny of the state's performance under the program, any environmental reviews conducted, and the adequacy of the state's legal, managerial, technical, and operational capabilities to run the program. The annual intended use plan report must document projects with considerable specificity, identify short and long-term goals as well as the types of activities to be supported, contain assurances and specific proposals on how the state intends to meet the five categories of specific requirements in the act, list criteria and methods for the distribution of funds, and document the public comment and review process and results.

State officials anticipate substantial administrative costs in complying with these requirements and the letter of credit. CWA sets aside 4 percent of the federal capitalization funds to cover administrative costs; the inevitable overage will be a state's responsibility and "must be paid from sources outside the SRF."[10]

Allocation Formula

The formula by which federal dollars are allocated to the states creates inequities for the Northeast-Midwest region. The region receives 53 percent of the appropriation to cover 57 percent of the national need, a 4 percent underfunding. By contrast, the South and West are overfunded by 4.8 percent. Although the Northeast-Midwest region's need fell from 65 percent to 57 percent of the national total between 1982 and 1988 (as documented in the *EPA Needs Surveys*), the region never has had funding commensurate with that need.[11] As shown in Table 4, allocations to the region have remained at 53 percent since 1983. Allocations to all the states and regions are shown in Table 5.

If federal funds were allocated according to the formula in CWA, every state would receive a percentage of the federal dollars nearly equal to its percentage of need. Slight deviation would occur because the funding formula is specifically designed to overprovide for states with the smallest populations because such states are known to have particular difficulty financing wastewater-treatment plant construction. The act specifies that no state shall receive less than 1/2 of 1 percent of the federal funds. Fractions of a percent also are allocated to each of the U.S. territories. The

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[9]EPA, Office of Municipal Pollution Control, *Final Questions and Answers, Title VI State Revolving Loan Fund Program* (Washington, D.C., November 1988), Sections III.B.7.3. and III.B.8.3.

[10]*Ibid.*, Section II.B.7.1.

[11]EPA, Municipal Construction Division, special computer run, Washington, D.C., December 1989, pp. 4-7.

allocation rates, which are revised and entered into CWA periodically, expire in 1990. The current rates are listed in Table 1.

Figure 1 of Appendix I compares each state's percentage of 1988 funding to its percentages of current year and design year need. It is divided into three parts for clarity. Section A consists of those states that are underfunded for current year need; Section B is those states that are similarly overfunded; Section C lists the nine states in the 1/2 of 1 percent category. When current year is compared to design year, underfunded states continue to be underfunded and overfunded ones remain overfunded, with only five exceptions. Figure 2 compares the northeastern and midwestern states.

Using the data for the current year, Figure 1 shows that

- three states, North Carolina, New Hampshire and Indiana, come within 5 percent of matching needs and grant funds;
- thirty-six states are overfunded and 14 states are underfunded;
- in the Northeast-Midwest region only Delaware, a 1/2 of 1 percent state, receives more than twice its need, compared to 11 states that receive twice to 19 times their need; and
- six states in the region are underfunded: the most seriously affected are Massachusetts receiving only 42 percent of its need, New York receiving 64.7 percent, and Connecticut receiving 66.3 percent.

Equitable revision of the formula to correct this bias would be no easy task but is doable. For example, using 1988 figures: if the states in Section B were granted the lesser of their present allotment or 125 percent of need on the assumption that conditions warranted some small bit of overfunding, $203.83 million could be made available to offset underfunding elsewhere. If the states in Section C were limited to receiving no more than three times their documented need, an additional $39.46 million would be available. The total savings would be more than the $240.52 million necessary to bring all the underfunded states up to funding at 85 percent of need.

5. Conclusions

The wastewater-treatment construction program has been and continues to be vital to progress in cleaning up the nation's waters. The declared intention of Congress to turn over wastewater treatment to the 50 states under federally mandated water-quality standards and after appropriation of one-time funds to underwrite state-run revolving loan programs is becoming reality. Carefully crafted and adequately funded, the revolving loan fund format can sustain the accomplishment while removing the year-by-year involvement from Congress.

However, if states are to assume the full program burden necessary to meet federally mandated water-quality standards they must have adequate tools--money, the freedom to identify and address the pollution sources within their borders, and a program that is attractive to their communities.

By accepting this program the states have assumed large financial responsibilities--to stretch $8.4 billion (plus their 20 percent) and make it cover the $81.7 billion of documented needs plus their other previously ineligible needs. Clearly the task will require every possible dollar available through grants, interest, and leveraging. At the 55 percent funding level allowed on projects under the now defunct construction grants program, the federal government's portion for just the four fully eligible categories of need would have been $26.6 billion, or three times the dollars committed to the SRF capitalization.

At the minimum, congressional appropriation levels should meet the commitment pledged in CWA. Congress should extend the appropriation period or increase the authorizations for the capitalization grants so that the full $8.4 billion authorized under the 1987 amendments can be appropriated. Funding of 75 percent or even 85 percent will not buy enough wastewater-treatment capability, nor does it provide as much assurance that Congress truly has dealt itself out of the funding role.

More economic burden is placed upon all states by the restriction on program dollars for administrative costs. For a program already funded with state money and intended to operate in perpetuity, the finite cap on administrative costs should be removed; program funds should be available for the duration of the program to cover reasonable administrative expenses.

Programs in states of the Northeast and Midwest are undercut by the bias in the allocation formula for grant funds. Any change in the funding formula should modify the 1/2 of 1 percent provision and reflect more accurately the equitable funding intended by the Clean Water Act.

Continuation of current eligibility restrictions on project funding is inappropriate for a program intended to deal with all wastewater needs forever. Amendments to Title VI of CWA should untie the hands of states so that projects that can be documented as most needed and beneficial can be supported promptly within the constraints of loan availability. Such documentation could be required in each state's annual intended use plan and carefully evaluated during EPA review of that report. Congress previously has used setaside provisions in CWA to ensure that each state adequately addressed certain water-quality problems, including the needs of rural communities and protection of estuaries. Similar provisions might provide enforcement when state plans are found by EPA review to fail to confront the diversity of need.

Congress should reconsider the effects of the carryover provisions and of EPA oversight so that what remains is both essential and meaningful. Under the current restrictions governing the state loans, local communities are considering that it may be easier and less expensive to take their business to the private sector. States fear that they will be left with only a stick and no carrot when enforcing water-quality requirements.

Northeastern and midwestern states have a great deal riding on the success of the SRF program and on the promulgation of a fair and equitable funding formula for the remaining capitalization grant years. With some facilities not yet in compliance with water-quality standards, backlogs of ineligible needs, and other facilities in compliance nearing the end of their design life, states need a strong, flexible program to sustain and broaden the construction momentum.

Appendix I
Tables and Graphs

Table 1
Wastewater Treatment Funding and Needs
(in millions of dollars)

State or Region	Current Percentage Funding Formula	Current Year		Design Year	
		Needs Assessment	Percentage Need	Needs Assessment	Percentage Need
New England					
Connecticut	1.24	1,267	1.87	1,392	1.67
Maine	0.78	288	0.43	341	0.41
Massachusetts	3.43	5,445	8.04	5,836	6.99
New Hampshire	1.01	709	1.05	854	1.02
Rhode Island	0.68	364	0.54	408	0.49
Vermont	0.50	202	0.30	209	0.25
Total	7.64	8,275	12.21	9,040	10.82
Mid-Atlantic					
Delaware	0.50	82	0.12	127	0.15
Maryland	2.45	866	1.28	919	1.10
New Jersey	4.13	3,351	4.95	3,754	4.50
New York	11.16	11,683	17.24	12,721	15.23
Pennsylvania	4.01	1,439	2.12	1,644	1.97
Total	22.24	17,421	25.71	19,165	22.95
Midwest					
Illinois	4.57	2,764	4.08	2,958	3.54
Indiana	2.44	1,582	2.34	1,721	2.06
Iowa	1.37	511	0.75	646	0.77
Michigan	4.35	3,125	4.61	3,321	3.98
Minnesota	1.86	902	1.33	1,106	1.32
Ohio	5.69	3,141	4.64	3,579	4.29
Wisconsin	2.73	1,204	1.78	1,399	1.68
Total	23.02	13,229	19.53	14,730	17.64
South					
Alabama	1.13	547	0.81	781	0.94
Arkansas	0.66	257	0.38	370	0.44
District of Columbia	0.50	274	0.40	278	0.33
Florida	3.41	3,984	5.88	6,186	7.41
Georgia	1.71	615	0.91	1,007	1.21
Kentucky	1.29	1,108	1.64	1,457	1.74
Louisiana	1.11	854	1.26	1,189	1.42
Mississippi	0.91	410	0.61	548	0.66
North Carolina	1.83	1,212	1.79	1,799	2.15
Oklahoma	0.82	285	0.42	476	0.57
South Carolina	1.04	441	0.65	684	0.82
Tennessee	1.47	898	1.33	1,467	1.76
Texas	4.62	3,306	4.88	4,975	5.96
Virginia	2.07	755	1.11	957	1.15
West Virginia	1.58	852	1.26	976	1.17
Total	24.14	15,798	23.32	23,150	27.72

Table 1
Wastewater Treatment Funding and Needs (continued)
(in millions of dollars)

State or Region	Current Percentage Funding Formula	Current Year		Design Year	
		Needs Assessment	Percentage Need	Needs Assessment	Percentage Need
West					
Alaska	0.61	107	0.16	781	0.94
Arizona	0.68	542	0.80	979	1.17
California	7.23	5,257	7.76	6,539	7.83
Colorado	0.81	163	0.24	196	0.23
Hawaii	0.78	236	0.35	413	0.49
Idaho	0.50	65	0.10	124	0.15
Kansas	0.91	485	0.72	720	0.86
Missouri	2.80	955	1.41	1,222	1.46
Montana	0.50	57	0.08	69	0.08
Nebraska	0.52	99	0.15	114	0.14
Nevada	0.50	101	0.15	165	0.20
New Mexico	0.50	92	0.14	130	0.16
North Dakota	0.50	31	0.05	34	0.04
Oregon	1.14	982	1.45	1,273	1.52
South Dakota	0.50	81	0.12	87	0.10
Utah	0.53	292	0.43	583	0.70
Washington	1.76	2,143	3.16	2,685	3.22
Wyoming	0.50	17	0.03	18	0.02
Total	21.26	11,705	17.28	16,132	19.32
Northeast	29.89	25,696	37.93	28,205	33.77
Midwest	23.02	13,229	19.53	14,730	17.64
Northeast and Midwest	52.90	38,925	57.45	42,935	51.41
South	24.14	15,798	23.32	23,150	27.72
West	21.26	11,705	17.28	16,132	19.32
South and West	45.40	27,503	40.60	39,282	47.04
U.S. Total[1]	100.00	66,749	100.00	83,512	100.00

[1]Totals do not include funds for Puerto Rico or the territories.

SOURCES: U.S. Environmental Protection Agency, Office of Municipal Pollution Control, *1988 Needs Survey Report Congress: Assessment of Needed Publicly Owned Wastewater Treatment Facilities in the United States* (Washington, D.C., 1989), pp. A-2 - A-5.

Table 2
1988 EPA Current Year Needs by Category
(in millions of dollars)

State or Region	Total	I	II	IIIA	IIIB	IVA	IVB	V	I,II, IIIA, IVB	IVA,V
New England										
Connecticut	1,267	270	102	25	16	287	175	392	572	695
Maine	288	126	1	25	11	58	47	20	199	89
Massachusetts	5,445	2,466	15	40	18	574	618	1,714	3,139	2,306
New Hampshire	709	104	6	9	5	210	144	231	263	446
Rhode Island	364	16	4	0	0	76	62	206	82	282
Vermont	202	63	28	1	4	16	16	74	108	94
Total	8,275	3,045	156	100	54	1,221	1,062	2,637	4,363	3,912
Mid-Atlantic										
Delaware	82	39	2	0	0	26	14	1	55	27
Maryland	866	168	395	40	0	49	205	9	808	58
New Jersey	3,351	1,380	167	240	319	301	153	791	1,940	1,411
New York	11,683	1,832	174	164	1,583	1,185	984	5,761	3,154	8,529
Pennsylvania	1,439	570	97	16	9	500	128	119	811	628
Total	17,421	3,989	835	460	1,911	2,061	1,484	6,681	6,768	10,653
Midwest										
Illinois	2,764	362	263	81	39	92	237	1,690	943	1,821
Indiana	1,582	184	102	48	10	190	104	944	438	1,144
Iowa	511	221	51	50	2	38	144	5	466	45
Michigan	3,125	793	28	68	26	385	696	1,129	1,585	1,540
Minnesota	902	321	51	19	167	26	99	219	490	412
Ohio	3,141	577	317	278	61	565	759	584	1,931	1,210
Wisconsin	1,204	513	141	56	2	131	139	222	849	355
Total	13,229	2,971	953	600	307	1,427	2,178	4,793	6,702	6,527
South										
Alabama	547	168	66	93	18	116	86	0	413	134
Arkansas	257	118	20	56	3	31	29	0	223	34
District of Columbia	274	95	179	0	0	0	0	0	274	0
Florida	3,984	907	252	42	24	2,150	607	2	1,808	2,176
Georgia	615	169	89	44	26	56	151	80	453	162
Kentucky	1,108	137	50	78	12	544	264	23	529	519
Louisiana	854	321	22	59	34	245	173	0	575	279
Mississippi	410	156	51	64	2	62	75	0	346	64
North Carolina	1,212	265	184	87	45	301	329	1	865	347
Oklahoma	285	77	73	12	12	30	81	0	243	42
South Carolina	441	168	23	21	0	76	153	0	365	76
Tennessee	898	339	73	155	18	212	92	9	659	239
Texas	3,306	1,273	415	245	79	279	1,015	0	2,948	358
Virginia	755	226	45	30	10	120	118	206	419	336
West Virginia	852	276	21	23	17	334	168	13	488	364
Total	15,798	4,695	1,563	1,009	300	4,556	3,341	334	10,608	5,130

Table 2
1988 EPA Current Year Needs by Category (continued)
(in millions of dollars)

State or Region	Total	I	II	IIIA	IIIB	IVA	IVB	V	I,II, IIIA, IVB	IVA,V
West										
Alaska	107	46	0	5	0	19	37	0	88	19
Arizona	542	297	81	2	2	47	113	0	493	49
California	5,257	2,472	26	358	652	341	367	1,041	3,223	2,034
Colorado	163	56	66	2	7	4	28	0	152	11
Hawaii	236	97	3	0	0	92	44	0	144	92
Idaho	65	28	3	5	3	15	10	1	46	19
Kansas	485	123	2	82	56	43	164	15	371	114
Missouri	955	425	1	10	70	54	252	143	688	267
Montana	57	17	2	0	9	19	10	0	29	28
Nebraska	99	50	2	1	8	8	10	20	63	36
Nevada	101	55	22	2	3	12	7	0	86	15
New Mexico	92	53	0	1	16	8	14	0	68	24
North Dakota	31	15	0	0	10	0	6	0	21	10
Oregon	982	211	123	45	147	296	58	102	437	545
South Dakota	81	50	3	2	2	10	12	2	67	14
Utah	292	173	32	39	4	24	20	0	264	28
Washington	2,143	865	18	130	79	207	287	557	1,300	843
Wyoming	17	8	0	1	2	1	5	0	14	3
Total	11,705	5,041	384	685	1,070	1,200	1,444	1,881	7,554	4,151
Northeast	25,696	7,034	991	560	1,965	3,282	2,546	9,318	11,131	14,565
Midwest	13,229	2,971	953	600	307	1,427	2,178	4,793	6,702	6,527
Northeast and Midwest	38,925	10,005	1,944	1,160	2,272	4,709	4,724	14,111	17,833	21,092
South	15,798	4,695	1,563	1,009	300	4,556	3,341	334	10,608	5,130
West	11,705	5,041	384	685	1,070	1,200	1,444	1,881	7,554	4,151
West and South	27,503	9,736	1,947	1,694	1,370	5,756	4,785	2,215	18,162	9,281
U.S. Total[1]	66,428	19,741	3,891	2,854	3,642	10,465	9,509	16,326	35,995	30,373

[1]U.S. totals do not include funds for Puerto Rico or the territories.

SOURCE: EPA, Office of Municipal Pollution Control, *1988 Needs Survey Report to Congress: Assessment of Needed Publicly Owned Wastewater Treatment Facilities in the United States* (Washington, D.C., 1989), p. A3.

Table 3
1988 EPA Design Year Needs by Category
(in millions of dollars)

State or Region	Total	I	II	IIIA	IIIB	IVA	IVB	V	I,II, IIIA, IVB	IVA,V
New England										
Connecticut	1,392	294	127	25	16	333	205	392	651	741
Maine	341	149	1	25	11	84	51	20	226	115
Massachusetts	5,836	2,526	34	40	18	731	773	1,714	3,373	2,463
New Hampshire	854	130	9	9	5	260	210	231	358	496
Rhode Island	408	37	4	0	0	91	70	206	111	297
Vermont	209	65	29	1	4	20	16	74	111	98
Total	9,040	3,201	204	100	54	1,519	1,325	2,637	4,830	4,210
Mid-Atlantic										
Delaware	127	48	2	0	0	43	33	1	83	44
Maryland	919	183	408	40	0	56	223	9	854	65
New Jersey	3,754	1,632	199	240	319	385	188	791	2,259	1,495
New York	12,721	1,908	198	164	1,583	1,948	1,159	5,761	3,429	9,292
Pennsylvania	1,644	638	113	16	9	600	149	119	916	728
Total	19,165	4,409	920	460	1,911	3,032	1,752	6,681	7,541	11,624
Midwest										
Illinois	2,958	475	284	81	39	108	281	1,690	1,121	1,837
Indiana	1,721	224	113	48	10	259	123	944	508	213
Iowa	646	256	55	50	2	42	236	5	597	49
Michigan	3,321	845	31	68	26	455	767	1,129	1,711	1,610
Minnesota	1,106	486	64	19	167	28	123	219	692	414
Ohio	3,579	725	359	278	61	672	900	584	2,262	1,317
Wisconsin	1,399	582	198	56	2	180	159	222	995	404
Total	14,730	3,593	1,104	600	307	1,744	2,589	4,793	7,886	5,844
South										
Alabama	781	232	92	93	18	152	194	0	611	170
Arkansas	370	189	26	56	3	46	50	0	321	49
District of Columbia	278	99	179	0	0	0	0	0	278	0
Florida	6,186	1,961	466	42	24	2,397	1,294	2	3,763	2,423
Georgia	1,007	307	129	44	26	82	339	80	819	188
Kentucky	1,457	185	60	78	12	671	428	23	751	706
Louisiana	1,189	474	31	59	34	323	268	0	832	357
Mississippi	548	217	65	64	2	81	119	0	465	83
North Carolina	1,799	408	223	87	45	432	603	1	1,321	478
Oklahoma	476	188	105	12	12	30	129	0	434	42
South Carolina	684	260	32	21	0	99	272	0	585	99
Tennessee	1,467	479	105	155	18	280	421	9	1,160	307
Texas	4,975	2,089	672	245	79	357	1,533	0	4,539	436
Virginia	957	316	83	30	10	146	166	206	595	362
West Virginia	976	314	23	23	17	387	199	13	559	417
Total	23,150	7,718	2,291	1,009	300	5,483	6,015	334	17,033	6,117

Table 3
1988 EPA Design Year Needs by Category (continued)
(in millions of dollars)

State or Region	Total	I	II	IIIA	IIIB	IVA	IVB	V	I,II, IIIA, IVB	IVA,V
West										
Alaska	221	94	0	5	0	19	103	0	202	19
Arizona	979	611	81	2	2	55	228	0	922	57
California	6,539	3,306	79	358	652	397	706	1,041	4,449	2,090
Colorado	196	75	69	2	7	4	39	0	185	11
Hawaii	413	170	4	0	0	138	101	0	275	138
Idaho	124	65	8	5	3	22	20	1	98	26
Kansas	720	190	3	82	56	46	328	15	603	117
Missouri	1,222	514	1	10	70	67	417	143	942	280
Montana	69	21	4	0	9	23	12	0	37	32
Nebraska	114	64	2	1	8	8	11	20	78	36
Nevada	165	83	41	2	3	17	19	0	145	20
New Mexico	130	55	0	1	16	31	27	0	83	47
North Dakota	34	17	0	0	10	0	7	0	24	10
Oregon	1,273	386	131	45	147	331	131	102	693	580
South Dakota	87	54	3	2	2	10	14	2	73	14
Utah	583	397	65	39	4	31	47	0	548	35
Washington	2,685	1,054	23	130	79	299	543	557	1,750	935
Wyoming	18	9	0	1	2	1	5	0	15	3
Total	15,572	7,165	514	685	1,070	1,499	2,758	1,881	11,122	4,450
Northeast	28,205	7,610	1,124	560	1,965	4,551	3,077	9,318	12,371	15,834
Midwest	14,730	3,593	1,104	600	307	1,744	2,589	4,793	7,886	5,844
Northeast and Midwest	42,935	11,203	2,228	1,160	2,272	6,295	5,666	14,111	20,257	21,678
South	23,150	7,718	2,291	1,009	300	5,483	6,015	334	17,033	6,117
West	15,572	7,165	514	685	1,070	1,499	2,758	1,881	11,122	4,450
West and South	38,722	14,883	2,805	1,694	1,370	6,982	8,773	2,215	28,155	10,567
U.S. Total[1]	81,657	26,086	5,033	2,854	3,642	13,277	14,439	16,326	48,412	32,245

[1]U.S. totals do not include funds for Puerto Rico or the territories.

SOURCE: EPA, Office of Municipal Pollution Control, *1988 Needs Survey Report to Congress: Assessment of Needed Publicly Owned Wastewater Treatment Facilities in the United States* (Washington, D.C., 1989), p. A5.

Table 4
Wastewater Treatment Needs vs. Allocations in the Northeast-Midwest Region: 1982-1989
(in millions of dollars)

	1982	1984	1986	1988	1989
Total Appropriation	2,393.2	2,400.0	1,774.2	2,269.4	1,863.2
Total Allocation to the NE-MW Region	1,231.4	1,500.2	946.9	1,201.7	986.7
Regional Percentage of Appropriation	51%	53%	53%	53%	53%
Regional Percentage of National Need	65%	60%	59%	57%	57%

SOURCES: Northeast-Midwest staff calculations on data from Environmental Protection Agency Needs Surveys and special computer run provided by EPA, Municipal Construction Division, Washington, D.C., December 1989, pp. 4-7.

Table 5
Wastewater Treatment Grant Allocations: Fiscal 1982 - Fiscal 1989
(in millions of dollars)

	1982	1984	1986	1988	1989 Con. Gr.	1989 SRF	1989 Total
New England							
Connecticut	26.1	29.9	22.1	28.0	11.4	11.7	23.1
Maine	17.7	18.7	13.8	17.8	7.2	7.4	14.6
Massachusetts	69.8	83.0	61.4	78.0	31.7	32.3	64.0
New Hampshire	20.8	24.4	18.1	23.0	9.3	9.5	18.0
Rhode Island	12.4	16.2	12.0	15.4	6.3	6.4	12.7
Vermont	11.8	11.9	8.8	11.3	4.6	4.7	9.3
Total	158.6	184.2	136.2	173.6	70.5	72.0	142.5
Mid-Atlantic							
Delaware	11.8	11.9	8.8	11.3	4.6	4.7	9.3
Maryland	56.6	59.2	43.7	55.6	22.6	23.0	45.6
New Jersey	83.4	100.0	74.0	93.9	38.1	38.9	77.1
New York	249.9	271.4	201.0	253.5	103.0	105.2	208.2
Pennsylvania	103.0	96.9	71.6	91.0	37.0	37.7	74.7
Total	513.7	539.4	399.1	505.3	205.3	209.5	414.8
Midwest							
Illinois	122.7	110.6	81.8	103.9	42.2	43.1	85.3
Indiana	65.4	59.0	43.6	55.4	22.5	23.0	45.5
Iowa	30.6	33.1	24.5	31.1	12.6	12.9	25.5
Michigan	97.6	105.2	77.8	98.8	40.1	41.0	81.1
Minnesota	44.1	45.0	33.2	42.2	17.2	17.5	34.7
Ohio	152.7	137.7	101.8	129.3	52.5	53.6	106.2
Wisconsin	46.0	66.1	48.9	62.1	25.2	25.8	51.0
Total	559.1	556.7	411.6	522.8	212.3	216.9	429.3
South							
Alabama	30.3	27.4	20.2	25.7	10.4	10.7	21.1
Arkansas	17.7	16.0	11.8	15.0	6.1	6.2	12.3
District of Columbia	11.8	11.9	8.8	11.3	4.6	4.7	9.3
Florida	90.6	82.6	61.0	77.5	31.5	32.2	63.7
Georgia	45.9	41.4	30.6	33.8	15.8	16.1	31.9
Kentucky	34.5	31.1	23.0	29.2	11.9	12.1	24.0
Louisiana	29.8	26.9	19.9	25.2	10.3	10.5	20.7
Mississippi	22.8	22.0	16.3	20.7	8.4	8.6	17.0
North Carolina	46.8	44.2	32.6	41.5	16.8	17.2	34.0
Oklahoma	21.9	19.8	14.6	18.6	7.5	7.7	15.2
South Carolina	27.8	25.1	18.5	23.5	9.6	9.8	19.3
Tennessee	36.6	33.5	26.3	33.4	13.6	13.8	27.4
Texas	103.0	92.9	68.7	105.0	42.7	43.5	86.2
Virginia	46.3	50.1	37.0	47.0	19.1	19.5	38.6
West Virginia	42.3	38.1	28.2	35.8	14.5	14.9	29.4
Total	608.1	563.0	417.5	543.2	222.8	227.5	450.1

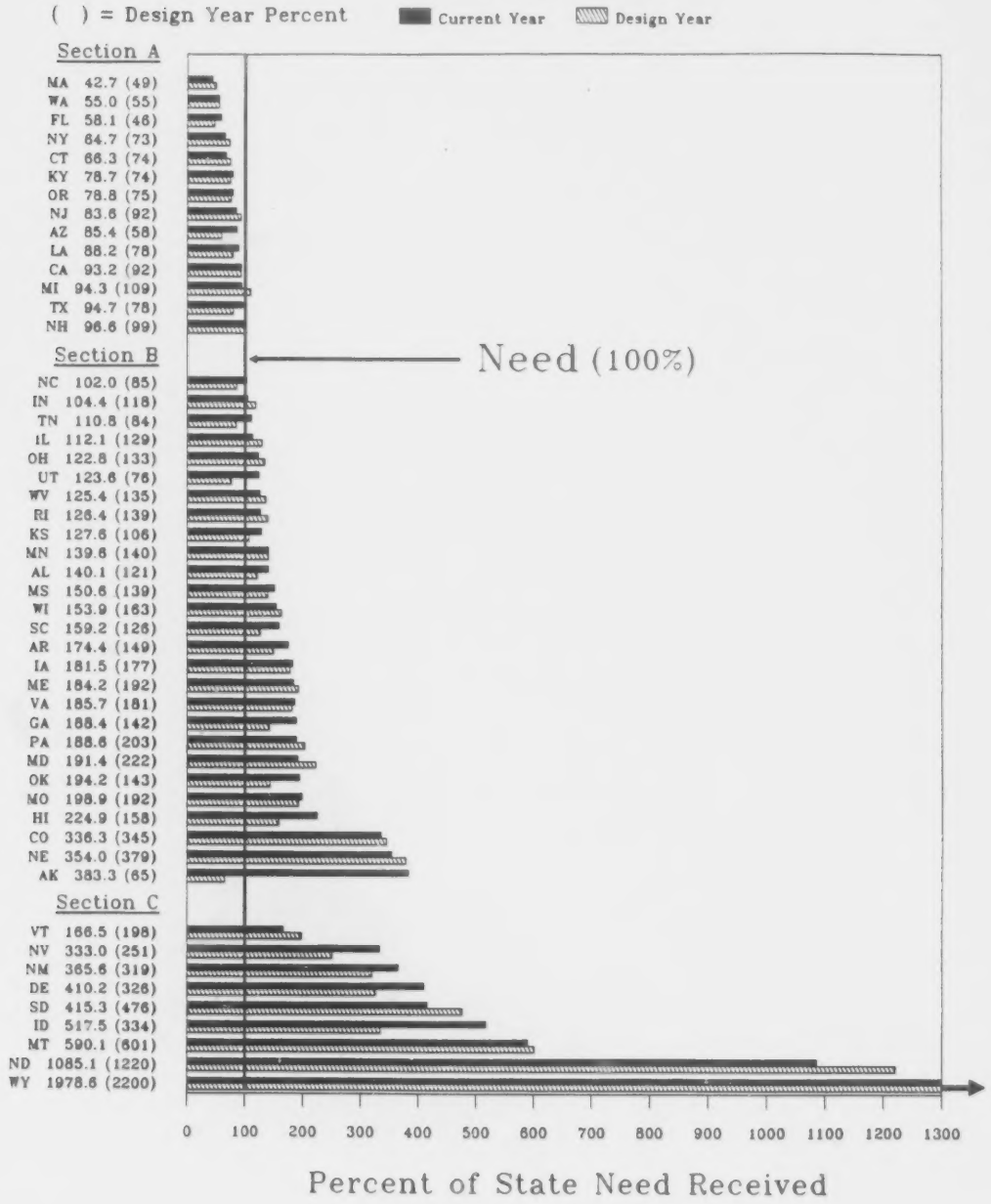
Table 5
Wastewater Treatment Grant Allocations: Fiscal 1982 - Fiscal 1989 (continued)
(in millions of dollars)

	1982	1984	1986	1988	1989 Con. Gr.	1989 SRF	1989 Total
West							
Alaska	11.8	14.6	10.8	13.7	5.6	5.7	11.3
Arizona	18.3	16.5	12.2	15.5	6.3	6.4	12.7
California	187.8	175.0	129.3	164.3	66.7	68.1	134.9
Colorado	21.7	19.6	14.5	18.4	7.5	7.6	15.1
Hawaii	18.7	18.9	14.0	17.8	7.2	7.4	14.6
Idaho	11.8	11.9	8.8	11.3	4.6	4.7	9.3
Kansas	20.8	22.1	16.3	20.7	8.4	8.6	17.0
Missouri	58.9	67.9	50.1	63.7	25.9	26.4	52.3
Montana	11.8	11.9	8.8	11.3	4.6	4.7	9.3
Nebraska	13.0	12.5	9.3	11.7	4.8	4.9	9.6
Nevada	11.8	11.9	8.8	11.3	4.6	4.7	9.3
New Mexico	11.8	11.9	8.8	11.3	4.6	4.7	9.3
North Dakota	11.8	11.9	8.8	11.3	4.6	4.7	9.3
Oregon	30.6	27.6	20.4	25.9	10.5	10.8	21.3
South Dakota	11.8	11.9	8.8	11.3	4.6	4.7	9.3
Utah	11.8	12.9	9.5	12.1	4.9	5.0	9.9
Washington	41.8	42.5	31.4	39.9	16.2	16.6	32.8
Wyoming	11.8	11.9	8.8	11.3	4.6	4.7	9.3
Total	517.8	513.4	379.4	482.9	196.2	200.4	396.6
Northeast	672.3	723.5	535.3	678.9	--	--	557.3
Midwest	559.1	556.7	411.6	522.8	--	--	429.3
Northeast and Midwest	1,231.4	1,280.2	946.9	1,201.7	--	--	986.6
South	608.1	563.0	417.5	543.2	--	--	450.1
West	517.8	513.4	379.4	482.9	--	--	396.6
South and West	1,125.9	1,076.4	796.9	1,026.1	--	--	846.7
U.S. Total[1,2]	2,393.2	2,400.0	1,774.2	2,269.4	--	--	1,863.2

[1]Numbers may not add due to rounding.
[2]Totals do not include funds for Puerto Rico or the territories.

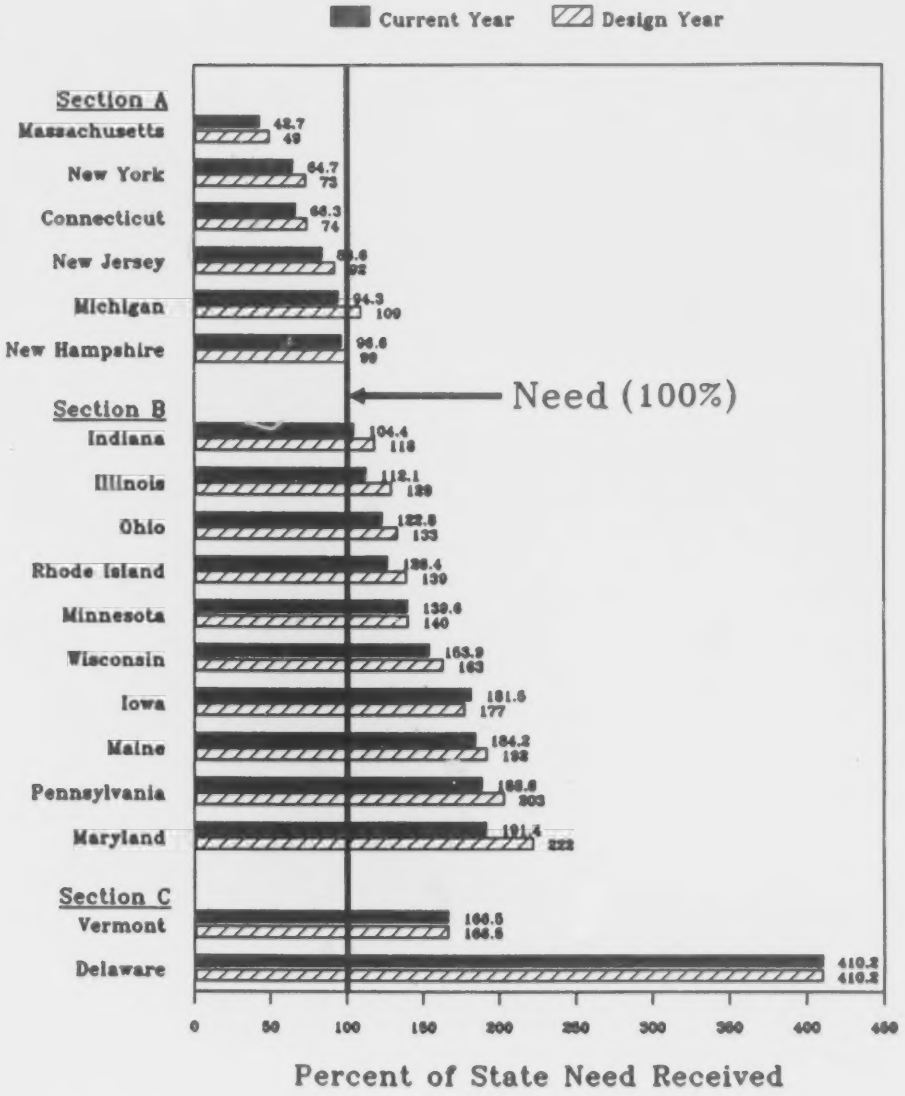
SOURCE: U.S. Environmental Protection Agency, Municipal Construction Division, special computer run, Washington, D.C., December 1989, pp. 4-7.

Figure 1
State Allocation as a Percent of State Need



SOURCES: Derived from data in EPA's *1988 Needs Survey Report to Congress* and the allocation rates in the 1987 Amendments to the Clean Water Act.

Figure 2
State Allocation as a Percent of State Need: Northeast-Midwest States



SOURCES: Derived from data in EPA's *1988 Needs Survey Report to Congress* and the allocation rates in the 1987 Amendments to the Clean Water Act.

Appendix II
Legislative History

Federal assistance to communities for the construction of wastewater treatment facilities began in the late 1940s. The program acquired its present scope and form in the Clean Water Act of the early 1970s.

Between 1971 and 1978, eligible wastewater-treatment construction projects received federal grants covering 75 percent of the cost; a 25 percent match was required from state or local funds. Grants were available for:

> the erection, building, acquisition, alteration, remodeling, improvement, or extension of treatment works which are defined as: any device and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature to implement section 201 of this act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment, and their appurtenances;. . .and any works, including site acquisition of the land that will be an integral part of the treatment process including land used for the storage of treated wastewater in land treatment systems prior to land application or is used for ultimate disposal of residues resulting from such treatment.

In 1977 grant levels were raised to 85 percent federal funds with a 15 percent state or local match and the criteria were amended. Projects to control pollutant discharges from separate storm sewer systems were not eligible for funding.

Amendments in 1984 dropped the federal grant share to 55 percent, thereby requiring a threefold increase in the local/state commitment. Eligibility was narrowed to cover only projects for secondary treatment, more stringent treatment, or cost-effective alternatives; new interceptor sewers and appurtenances; and infiltration and inflow correction. Congress did allow previously eligible public wastewater-treatment projects deemed most needed by the governor of the state to receive up to 20 percent of the federal funds. Combined sewer overflows are eligible only if they are a major priority of the state; reserve capacity is not eligible for funding.

Planning and preparation expenses are paid as a reimbursement after a project is accepted for construction funding. Therefore, communities must meet the up-front costs in the hope that the project will be accepted for funding. Up to 10 percent of the state's allotment can be used to help small communities otherwise unable to cover these costs. Four percent of each state's allotment is set aside to cover administrative costs.

When Congress again amended the Construction Grants Program in 1987, it structured the phase out of federal construction grants over four years, required that federal funding available through construction grants be obligated to projects before October 1, 1990, and authorized the establishment of state revolving loan fund programs. Appropriation of federal capitalization funds began in fiscal 1989. Although the SRF programs are run by the states, Congress carried over the criteria for project eligibility and broad EPA oversight. Congress also enacted the allocation rates for fiscal 1987 through fiscal 1990.

Definitions of the Categories of Need

Category I: Secondary Treatment

The minimum level of treatment that must be maintained by all treatment facilities, except those facilities granted ocean discharge waivers under Section 301h of the Clean Water Act. Treatment levels are specified in terms of the concentration of conventional pollutants in the wastewater being discharged from a facility. Secondary treatment requires an 85 percent reduction in conventional pollutant concentration (organic wastes and suspended solids) in the wastewater treated by a facility. Needs reported in this category are necessary to attain secondary treatment.

Category II: Advanced Treatment

A level of treatment more stringent than secondary treatment, requiring greater than 85 percent reduction in conventional pollutants, or a significant reduction in nonconventional pollutants present in the wastewater treated by a facility.

Category IIIA: Infiltration/Inflow Correction

Measures to control the entry into a sewer system of water other than wastewater from the ground through such means as defective pipes or manholes (infiltration) or from sources such as drains, storm sewers, and other improper entries into the system (inflow).

Category IIIB: Replacement/Rehabilitation of Sewers

Reinforcement or reconstruction of structurally deteriorating sewers above and beyond normal maintenance.

Category IVA: Collector Sewers

Pipes used to collect and carry wastewater from an individual source to an interceptor sewer that will convey the wastewater to a treatment facility.

Category IVB: Interceptor Sewers

Major sewer lines which receive wastewater flows from collector sewers and carry the flow to the treatment plant or to another interceptor.

Category V: Combined Sewer Overflows (CSO)

A discharge of a mixture of stormwater and domestic wastes that occurs when the flow capacity of a sewer system is exceeded during a rainstorm. Costs reported are for eligible facilities to prevent or control periodic overflows of untreated wastes from sewers which convey a combination of wastewater and stormwater. This category does not include costs for overflow control allocable to flood control or drainage improvement, or for treatment or control of stormwater in separate storm and drainage systems.

SOURCE: EPA, *1988 Needs Survey Report to Congress* (Washington, D.C., 1989), pp. 23-24.

Federal Laws And Authorities
Not Specified in the Clean Water Act

Environmental

Archeological and Historic Preservation Act of 1974, PL 93-291
Clean Air Act, 42 U.S.C. 7506(c)
Coastal Barrier Resources Act, 16 U.S.C. 3501, et seq.
Coastal Zone Management Act of 1972, PL 92-583, as amended
Endangered Species Act 16 U.S.C. 1531, et seq.
Executive Order 11593, Protection and Enhancement of the Cultural Environment
Executive Order 11988, Floodplain Management
Executive Order 11990, Protection of Wetlands
Farmland Protection Policy Act, 7 U.S.C. 4201, et seq.
Fish and Wildlife Coordination Act, PL 85-624, as amended
National Historic Preservation Act of 1966, PL 89-665, as amended
Safe Drinking Water Act, section 1424(e), PL 92-523, as amended
Wild and Scenic Rivers Act, PL 90-542, as amended

Economic

Demonstration Cities and Metropolitan Development Act of 1966, PL 89-754, as amended
Section 306 of the Clean Air Act and Section 508 of the Clean Water Act including Executive Order 11738, Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants, and Loans

Social Legislation

Age Discrimination Act, PL 94-135
Civil Rights Act of 1964, PL 88-352
Section 13 of PL 92-500; Prohibition against sex discrimination under the Federal Water Pollution Control Act
Executive Order 11246, Equal Employment Opportunity
Executive Orders 11625 and 12138, Women's and Minority Business Enterprise
Rehabilitation Act of 1973, PL 93-112 (including Executive Orders 11914 and 11250)

Miscellaneous Authority

Uniform Relocation and Real Property Acquisition Policies Act of 1970, P.L. 91-646
Executive Order 12549, Debarment and Suspension

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